



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

DOGM
MINERALS PROGRAM
FILE COPY

September 14, 1990

TO: File

FROM: Holland Shepherd, Reclamation Specialist *HWS*

RE: Site Inspection, Jumbo-Jensen Quarry, U. S. Gypsum, M/041/008, Sevier County, Utah

Date of Inspection: September 12, 1990

Time of Inspection: 2:00 p.m. - 6:00 p.m.

Attendees: Mr. Dave Hollingshead, Quarry Manager, U. S. Gypsum, and myself

This inspection was performed as a means of catching up on some of the reclamation activities that have been ongoing at the Jumbo-Jensen site over the last 2 years. The last inspection of this site was made in the early part of 1988.

The operator has been working with a Mining and Reclamation Plan that was approved in 1988. Basically, the plan calls for the contemporaneous reclamation of several sites across the operator's property. The operator mined several pits simultaneously as a means of blending the gypsum ore to get the proper percentage of product to maintain a quality gypsum board manufacturing process. As the operator mines these various quarries, areas will become depleted of marketable ore. These areas are then designated for reclamation for the following year. The operator has submitted an amendment to this earlier Mining and Reclamation Plan asking that the Division reduce the language in the plan that calls for at least 10 acres of reclamation each year down to 6 acres each year. The reason for this is that the operator has been finding more marketable ore during some of these reclamation activities that they are not eager to cover up. I indicated to Mr. Hollingshead that there should not be any problem in approving this plan amendment and that I would do so as soon as I was able.

The first area we took a look at was the waste board dump area surrounding the process plant. The process plant is not in the operator's Mining and Reclamation Plan. Probably the most significant disturbance associated with this operation concerns the waste board dumping area surrounding the U. S. Gypsum Process Plant or Mill. The reason is because the material was dumped in a wetlands or riparian area associated with the Sevier River drainage. The Sevier River runs just east of the U. S. Gypsum Mill. The area to the east of the mill is quite flat and contains a meander belt associated with the Sevier River, swamp lands, and still water. The waste material itself, for the most part, is situated either adjacent or right on top of these wetlands.

Mr. Davis indicated to me that the waste dumps were not permitted with the Bureau of Solid and Hazardous Waste. The reason for that is that they are quite old and have been grandfathered. Some of these dumps were probably initiated in the 1920's, most of them were initiated in the 1940's. The only regulatory agency that has said anything about these dumps, thus far, is the Army Corp of Engineers, which required U. S. Gypsum to move some of the dump material away from the wetlands a year ago.

The problem with this type of site, of course, is the fact that there is a lot of waste material being dumped next to or into a wetlands area. This material can impact the wetlands by creating excess sediment or blocking flow. A fair amount of paper trash is associated with this material along with the gypsum rock from which it is made.

A portion of these dump areas are still active. Mr. Hollingshead indicated to me that the operation may begin to recycle some of this material. The rest of the inspection consisted of looking at various sites that the operator was involved in mining or reclaiming at the time. The operator is mining two zones, one closest to the mill site is called the Jumbo Claims area; the one furthest away, which is about 7 miles away from the mill site is called the Jensen Claims area. Within these two areas are several sites consisting of active gypsum quarrying and active reclamation of older quarries. During the inspection we looked at the C 5, 6 and 7 areas and the oil well pit area. Again, in these areas, there was active mining going on and reclamation.

Most of these areas have reclamation that is only about a year old. Some of these areas have been recontoured, regraded only, and not yet reseeded. Areas that have been reseeded and are about a year old do not show very successful revegetation. The plant species that are onsite consist mostly of halogeton and russian thistle. These

species are undesirable species and would not count towards a final reclamation release for these sites.

The major problem in the area that the operator has been encountering has been the drought. This has, obviously, had an effect on the seeding success on various sites across the plant area. The site is dry to begin with but the drought conditions have aggravated that lack of moisture and very few of the seeded species have germinated under those conditions.

The operator has done a very good job in recontouring, regrading these past quarry sites, has made sure the sharp edges and steep slopes have been knocked down and smoothed over quite adequately. This will enhance the plant regrowth capacity of these areas considerably. The problem with getting seeded plants to grow in these areas will probably continue as long as there is a drought, but will be alleviated over the long run because of the exceptional recontouring job the operator has performed. Plant species will be able to invade on these areas and will be able to survive because the area has been regraded adequately.

We looked at the operator's landfill which is located at the furthest northeastern portion of the site, close to the oil well pit. The landfill is composed of a old quarry pit that the operator is using for dumping of recently generated wallboard waste material from the plant. The pit is about 20 - 30 feet deep; it is fenced to prevent animals from walking into it and also to control the trash from blowing around the site. The operator has sited this landfill very well in that it is not associated with any drainages on the site. It is at a high point on the site, water will not drain into it and water will not very likely drain out of it. The operator also drilled 5 - 10 foot wells at the bottom of the pit before starting the landfill to determine whether or not there was ground water close to the surface. The operator is also being conscientious about compacting the soil material, and waste material to prevent dust and debris blowing on the site.

We looked at a test area that had been initiated some 3 - 4 years ago by U. S. Gypsum on material similar to that originating from the quarries. The area is not very well vegetated with perennial species. There were many weedy species such as halogeton, russian thistle and purple mustard. However, looking close, small tufts of grasses could be seen growing and would probably be doing a lot better in a better moisture year. Also, several species of saltbush and shadescale were growing on the site. Rabbitbrush was coming up too. This site probably will, over a period of years, reclaim nicely. The problem in an area as dry as this, is that the three year waiting

Page 4
U. S. Gypsum
M/041/008
September 14, 1990

period required in the rules, is no doubt to short a period to determine whether or not an area has been adequately reseeded. This area is coming back, but will take a long time to match the native plant community.

Another contractor is involved at the Jumbo-Jensen site and is mining in anhydrite. This contractor has the permission of U. S. Gypsum to mine this particular product and remove it from the site. U. S. Gypsum has agreed with this operator, that the operator will reclaim in like manner to the type of reclamation that U. S. Gypsum has committed to reclaim on their site.

Another mine operation is active in the proximity of U. S. Gypsum properties. A small operator is mining anhydrite, not affiliated with U. S. Gypsum. The name of the company is either Western Clay Products or American Clay Products. I will need to look up this company when I get back to the office to determine whether or not they have submitted a Notice with the Division. Also to determine whether or not they are on BLM properties.

The types of grass species that appear to be doing well in these harsh droughty conditions on the Jumbo-Jensen site are: crested wheatgrass and indian ricegrass. I didn't observe any other grass species that were in the seeded mix surviving on the reclamation site.

jb
cc: Dave Hollingshead, U. S. Gypsum
Wayne Hedberg, DOGM
MNM041008.1